

State of California
AIR RESOURCES BOARD

Staff Report: Initial Statement of Reasons
for Proposed Rulemaking

**PUBLIC HEARING TO CONSIDER A ONE-YEAR POSTPONEMENT OF THE
REQUIREMENT THAT 1998 AND SUBSEQUENT MODEL-YEAR VEHICLES
PRODUCED BY ULTRA-SMALL VOLUME MANUFACTURERS MEET THE
ENHANCED EVAPORATIVE EMISSION REQUIREMENTS**

Date of Release: April 4, 1997
Scheduled for Consideration: May 22, 1997

I. INTRODUCTION

In a 1990 - 1991 rulemaking, the Air Resources Board (ARB or "the Board") adopted regulatory amendments that established enhanced evaporative emission test procedures applicable to 1995 and subsequent model-year (MY) passenger cars, light-duty trucks, medium-duty vehicles, and heavy-duty vehicles. For most manufacturers, the enhanced test procedures were phased in during the 1995 - 1997 MYs, with 100 percent compliance required starting with the 1998 MY. A small volume manufacturer (SVM) is not subject to the 1995 - 1997 MY phase-in requirements, but 100 percent of the manufacturer's 1998 and subsequent MY vehicles must comply with the enhanced evaporative emission requirements. An SVM is defined as a manufacturer with California sales less than or equal to 3,000 per MY, based on the average number of vehicles sold by the manufacturer in the previous three consecutive MYs.

Some small volume manufacturers have vehicle sales in California far below the 3,000 per year cut-off in the regulation. The Coalition of Small Volume Automobile Manufacturers (COSVAM) is a recently-formed organization open to manufacturers that produce fewer than 5,000 vehicles per year world-wide. As of January 1997, COSVAM had 19 members with combined California sales of about 1000 vehicles per MY.

COSVAM has requested that the ARB delay the enhanced evaporative emission phase-in requirement for its members one year until the 1999 MY. As discussed below, the staff is proposing that the Board adopt a one-year postponement for "ultra-small volume manufacturers" (USVMs) -- manufacturers with California sales less than or equal to 300 vehicles per year. This would align the California phase-in requirement for USVMs with the United States Environmental Protection Agency (U.S. EPA) enhanced evaporative emission phase-in requirement for SVMs.

II. PROPOSED REGULATION

A. Background

The ARB has administered evaporative emission standards and test procedures for California motor vehicles since the 1970s. Following a hearing in August 1990, the Board adopted enhanced test procedures which were designed to more effectively control evaporative emissions during summer months when high ambient temperatures exacerbate the potential for high evaporative emissions. The enhanced requirements include a running loss determination, real-world hot soak and diurnal testing conditions, and the same durability requirements for evaporative emission control systems as are applicable to exhaust emission control systems. The standard for the hot soak plus the diurnal emissions test is 2.0 grams per test. Amendments adopted in 1994 made various changes, including the addition of a supplemental procedure that was patterned after a U.S. EPA requirement and was designed to help assure adequate purge of the carbon canister during short trips.

The California enhanced evaporative emission test procedures are phased in from the 1995 through the 1998 MYs. For all but SVMs, the phase-in requirements are 10% in 1995, 30% in 1996, 50% in 1997, and 100% in 1998. SVMs are exempted from the phase-in schedule but are required to comply with the enhanced test procedures for 100% of their vehicle fleet in 1998.

In 1993, the U.S. EPA adopted enhanced evaporative emission test procedures that are similar to the California requirements. (58 F.R. 16002 (March 24, 1993).) The federal requirements are phased in for a manufacturer's vehicle sales during the following model years: 20% in 1996, 40% in 1997, 90% in 1998, and 100% in 1999. SVMs -- defined as those with U.S. vehicle sales of less than 10,000 vehicles per year -- are exempt from the federal enhanced requirements until the 1999 MY, when 100% compliance is required.

On December 13, 1996, representatives from COSVAM met with ARB staff to discuss the phase-in requirements of the enhanced evaporative emission test procedures. Specifically, COSVAM requested that the ARB delay the California phase-in requirement for USVMs by one MY, from 1998 to 1999.

B. Discussion

At the December 13, 1996 meeting with COSVAM, ARB staff requested information on how the current enhanced evaporative emission requirements would impact USVMs. COSVAM responded by submitting a letter dated January 21, 1997 describing their concerns; a copy of this letter is attached as Appendix A.

The letter in Appendix A lists the 19 vehicle manufacturers who belong to COSVAM. The majority of the members produce specialty vehicles. Examples of COSVAM member companies include Ferrari, Morgan, and Rolls Royce. The vehicles produced by COSVAM members are infrequently driven (well below 10,000 miles per year) and are generally considered "exotic" or

“collector” vehicles. As noted above, all COSVAM members produce fewer than 5,000 vehicles per year world-wide, and the total of combined vehicle sales of all 19 COSVAM members in California is approximately 1,000 per year.

Due to the small number of vehicles produced by COSVAM members, emission requirements imposed on these manufacturers present a considerable challenge. Along with the enhanced evaporative emission requirements, COSVAM members will be required to comply with the SVM low-emission vehicle and the on-board refueling vapor recovery requirements starting with the 2000 MY, and with various elements of the enhanced OBD II requirements in the next few MYs. Most USVMs rely on outside suppliers for their engineering, hardware, software, and testing services or supplies. Furthermore, the fact that USVMs produce so few vehicles makes it difficult to locate suppliers willing to design their components for USVM’s needs. When they do find a supplier, the cost of the components can be high because the research and development costs are distributed over a very small number of vehicles. Thus, the per-vehicle cost of compliance with emission regulations is relatively high. In order to reduce these costs, USVMs prefer to implement their design changes for both California and the rest of the country within one MY.

If the ARB does not allow the phase-in delay requested by COSVAM, many USVMs have indicated that they will be forced to forego sales of their 1998 MY vehicles in California, which will result in a significant financial impact on both the USVMs and the dealerships which sell these vehicles in California.

Estimates provided by COSVAM indicate that approximately 625 vehicle sales in California would be foregone as a result of not delaying the implementation schedule. This is equivalent to an annual loss of approximately \$30 million in manufacturer and importer net revenues. In addition to the impact on USVMs, there would be a corresponding loss of vehicle sales to California dealerships, as well as any businesses supporting the sale, maintenance and repair of such vehicles. COSVAM estimates that California dealerships alone will be subjected to a loss of about \$26 million in annual net revenues.

C. Description of Proposed Amendments

To accommodate COSVAM’s request, ARB staff is proposing regulatory amendments that would add a requirement that 100% of a USVM’s vehicle fleet must comply with the enhanced evaporative emission requirements starting in MY 1999. The amendments would define “ultra-small volume manufacturer” to mean a manufacturer that sells less than or equal to 300 vehicles per MY in California, based on the average number of vehicles sold by the manufacturer in the previous three consecutive model years. This definition would cover the sorts of extremely small volume manufacturers that make up COSVAM’s membership. It would not include manufacturers who, although they meet the 3,000 vehicle per year cut-off for small volume manufacturers, sell far more than 300 vehicles per year in California. The proposed amendments would harmonize the California enhanced evaporative emission requirement for USVMs with the federal enhanced evaporative emission phase-in requirement applicable to these manufacturers.

III. SUMMARY OF RECOMMENDED ACTION

For the reasons stated above, ARB staff is proposing that the Board amend Title 13, California Code of Regulations (CCR), section 1976, and the incorporated “California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles,” as set forth in Appendices B and C. Along with the changes described above, the amendments to the California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles include various nonsubstantive editorial revisions that add titles for various sections and subsections to make the test procedure document more understandable.

IV. ECONOMIC AND ENVIRONMENTAL IMPACTS

A. Economic Impacts

All ultra-small volume automobile manufacturers with California sales of less than or equal to 300 vehicles per year are expected to benefit from the proposed amendments. The amendments were developed in response to a request from COSVAM that its members need an additional year to meet the enhanced evaporative emission phase-in requirement. According to COSVAM’s estimates, the one-year delay would prevent USVMs from losing sales of about 625 California vehicles, with net revenues totaling about \$30 million. Although none of the likely USVMs are located in California, the extension would be beneficial to California businesses involved in the sales, maintenance and repair of such vehicles; COSVAM estimates that extension would avoid the loss of approximately \$26 million in net revenue from dealership sales, parts, and services in California. Implementation of the proposed amendments is not expected to result in any increased costs to automobile manufacturers, automobile dealerships, or businesses supporting the sale, maintenance and repair of vehicles produced by USVMs. As a result, ARB staff expects the proposed amendments to have no noticeable adverse impacts on California employment, business status, and competitiveness.

The proposed amendments also are not expected to cause a noticeable change in the cost or savings to any state, local agency and school district. Neither is it expected to create a cost or savings in federal funding to the state.

B. Air Quality

The ARB staff has determined that the proposed regulatory amendments would result in a very small loss of the emission benefits that would otherwise result from imposition of the enhanced evaporative emission requirements on all SVMs in the 1998 MY. In delaying the enhanced evaporative test requirements from 1998 to 1999 for USVMs, the affected vehicles will

be subjected to less stringent evaporative emission requirements, and thus continue to emit a greater quantity of evaporative emissions during one more MY.

COSVAM has estimated that these proposed amendments will affect approximately 625 vehicles produced by USVMs and intended for sale in California. The projected statewide losses of emission benefits for calendar years 2000, 2005, and 2010 are given in Table 1. It should be noted that this analysis assumes USVM vehicle activity to be equivalent to the rest of the fleet in that per-vehicle mileage accumulation and evaporative emissions are treated no differently. The emission impacts are over-estimated as a result of this assumption. Thus, this analysis should be viewed as a worst-case scenario.

As can be seen from Table 1, implementation of the proposed amendments will result in emission increases ranging from 4 to 14 lbs/day, which represents an extremely small fraction of the total statewide emission inventory of light-duty passenger vehicles. For example, in year 2005, the adoption of the amendments would result in an additional 11 lbs/day of TOG (total organic gases), which represents only 0.0034% of the total statewide emission inventory of light-duty passenger vehicles.

Table 1

Statewide TOG Emission Impacts Resulting from
Adoption of the Proposed Amendments*

Calendar Year	Impact (lbs/day)**	Baseline LDP Emissions (tons/day)	% of Total LDP Emissions
2000	4	200	0.0011
2005	11	161	0.0034
2010	14	121	0.0058

* Based on use of MVEI7G version 1.0 emission factors for the statewide fleet of light-duty passenger vehicles (LDP).

** Assumes a one-year delay (1998 to 1999) of the enhanced evaporative emission standards and test procedures, applicable to 625 vehicles.

Although the expected loss in emission benefits resulting from the proposal is very small, it could still constitute a significant adverse environmental impact. The staff has not identified any feasible mitigation measures that have not already been used to demonstrate attainment in the

State Implementation Plan. The staff has not identified any alternatives that would still allow the sale of 1998 model-year vehicles presently being sold by USVMs.

C. Other Environmental Impacts

The ARB staff has determined that adoption of the proposed amendments will not result in any significant adverse impacts on water quality, land or biological resources.